
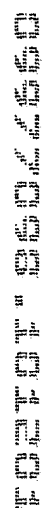


WHAT IS CLAIMED IS:

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1. A data storage device for storing and accessing data in tracks on a medium, each track having a data layout comprising:
 - a first data section;
 - a second data section;
 - a third data section;
 - a first spin pad located between the first data section and the second data section and having a first length; and
 - a second spin pad located between the second data section and the third data section and having a second length that is different from the first length.
 2. The data storage device of claim 1 wherein the data layout further comprises a reference mark before the first data section.
 3. The data storage device of claim 2 wherein the first length is a function of the distance from the reference mark to a beginning of the first spin pad.
 4. The data storage device of claim 3 wherein the second length is a function of the distance from the reference mark to a beginning of the second spin pad.
 5. The data storage device of claim 3 wherein the first length is further based on a worst case delay in detecting the reference mark.

6. The data storage device of claim 1 wherein the first data section comprises a data block.
7. The data storage device of claim 6 wherein the first data section further comprises a gap.
8. A method of determining the length for a spin pad section in a track layout of a storage medium, the method comprising:
 - determining a nominal time period between a detection of a reference mark and a beginning of the spin pad; and
 - using the nominal time period to set the length for the spin pad.
9. The method of claim 8 wherein using the nominal time period to set the length comprises:
 - determining a nominal time span for the spin pad; and
 - converting the nominal time span into a length.
10. The method of claim 9 wherein determining a nominal time span comprises multiplying the nominal time period to the beginning of the spin pad by a rate factor that is based on the speed of a head moving over the storage medium.
11. The method of claim 10 wherein the rate factor is based on a fastest expected speed for the head and a slowest expected speed for the head.

12. The method of claim 9 wherein determining the nominal time span comprises determining a maximum delay in detecting the reference mark and using the maximum delay as part of determining the nominal time span.

13. The method of claim 8 wherein determining the nominal time period between a detection of a reference mark and a beginning of the spin pad comprises determining a nominal time span for an early spin pad located between the reference mark and the beginning of the spin pad.

14. The method of claim 8 wherein determining the nominal time period between a detection of a reference mark and a beginning of the spin pad comprises determining a nominal time span for a block of data.

15. The method of claim 14 wherein determining the nominal time period between a detection of a reference mark and a beginning of the spin pad further comprises determining a nominal time span for a gap after the block of data.

16. A data storage medium capable of storing data and having a track layout comprising:

a first data section and a second data section; and

overwrite protection means in the layout for preventing the first data section from overwriting the second data section based in part on the length of the first data section.

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17. The data storage medium of claim 16 wherein the overwrite protection means comprises a spin pad.
18. The data storage medium of claim 17 wherein the spin pad has a length that is based in part on the length of the first data section.
19. The data storage medium of claim 18 wherein the spin pad has a length that is based on a distance from a reference mark to the beginning of the spin pad.
20. The data storage medium of claim 19 wherein the spin pad has a length that is a linear function of the distance from the reference mark to the beginning of the spin pad.
21. The data storage medium of claim 16 wherein the first data section comprises a data block.
22. The data storage medium of claim 21 wherein the first data section further comprises a gap.

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